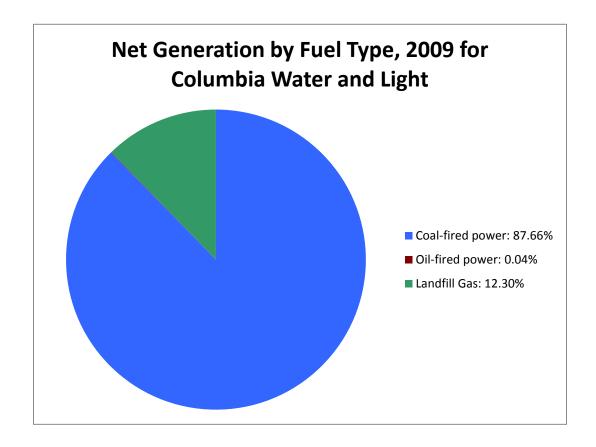


## Columbia Water and Light Utility-Owned Electric Generation and Emissions in 2009

	Fuel	Percent	of Total	Net Electric	Percent	of Total
	Consumption,			Power		
	<b>MMBTUs</b>			Generated in		
				2009 (MWh)		
Non-renewable sources						
Coal-fired power	1,075,464	99.96%		75,961	99.95%	
Natural gas-fired power	0			0		
Oil-fired power	394	0.04%		35	0.05%	
Nuclear power						
Other non-renewable						
power						
Non-renewable total	1,075,858	100.00%	90.04%	75,996	100.00%	87.70%
Renewable sources						
Hydroelectric Power						
Wind						
Waste and biomass						
Solar						
Geothermal						
Landfill Gas	119,043	100.00%		10,657	100.00%	
Renewable total	119,043	100.00%	9.96%	10,657	100.00%	12.30%
Grand total all sources	1,194,901		100.00%	86,654		100.00%

s	Number of Units	Physical Units	Fuel Type
41,364	41.	Short Tons	<b>Bituminous Coal</b>
0		Mcf	Natural Gas
68		Barrels	Distillate Fuel Oil
297,604	297,	Mcf	Landfill Gas
_		MC1	Landini Gas







## Emissions from Electricity Generated in 2009: Columbia Water and Light

Plant	Carbon Dioxide	Carbon	Ammonia (NH3)	Nitrogen Oxides	Sulfur Dioxides
	(CO2) (Tons)	Monoxide (CO)	(Tons)	(NOx) (Tons)	(SO2) (Tons)
		(Tons)			
Columbia	124,617.53	117.86	11.69	304.86	908.61
Water and					
Light					
Columbia	124,617.53	117.86	11.69	304.86	908.61

Plant	Volatile Organic Compounds	Course Particulate	Fine Particulate Matter (PM2.5	Mercury (Hg) (LBS)
	1		,	(LDS)
	(VOC) (Tons)	Matter (PM10	Total) (Tons)	
		Total) (Tons)		
Columbia	1.43	23.43	22.60	0.01
Water and				
Light				

'NV' = Emissions value not available.

Note: The data provided includes only generation and emissions from power plants owned by the utility. It does not include generation or emissions from power purchased by the utility and distributed to its customers.



## Pollution controls installed on plants operated by Columbia Water and Light

SO2 Controls			
Plant	Control Equipment	Sorbent Type	Operational Efficiency
Columbia	No SO2 Controls Installed		

NOX Controls				
Plant	Device Type	Description	Capture	Control
			Efficiency	Efficiency
Columbia	No NOX Controls Installed			



Missouri Power plants owned and operated by Columbia Water and Light in 2009

Plant	County	Primary Fuel	Capacity (MW)	Net Generation (MWh)
Columbia	Boone	Natural Gas	101	86,654

## **Data Sources**

- Emissions Data: Missouri Department of Natural Resources, Air Pollution Control Program, Missouri Emissions Inventory System (MOEIS) http://www.dnr.mo.gov/env/apcp/moeis/emissionsreporting.htm
- CO2 Emissions calculated by Missouri Department of Natural Resources, Division of Energy, from EIA Fuel Consumption Data
- Fuel Consumption and Generation Data: United States Energy Information Administration, Form 923, United States Department of Energy http://www.eia.gov/cneaf/electricity/page/eia906\_920.html